HIGH RESOLUTION COHERENT 2D AND 3D SPECTROSCOPY

PETER CHEN, THRESA WELLS, *Department of Chemistry, Spelman College, Atlanta, GA, USA*.

High resolution coherent multidimensional spectroscopy is a powerful new tool that can be used to overcome difficulties encountered with other forms of spectroscopy. The 2D spectra have reduced congestion and show easily recognizable patterns, even for molecules that yield patternless 1D spectra Furthermore, the peaks are automatically sorted by quantum number and species. The 3D technique further reduces congestion, provides selectivity, and can be used to generate unique 3D rotational patterns. This talk provides an overview of newly developed high resolution coherent 2D and 3D techniques.